

CLAIMS

What is claimed is:

1. In a palletizing device including a layer formation structure defining a layer
5 building plane, an improvement comprising:
a contact element movable between a first position and a second position, said
first position being at least one of at and below said layer building plane and said second
position being above said layer building plane.
- 10 2. An improvement according to claim 1 wherein said layer building plane lies
coincident with a set of retractable rollers.
3. An improvement according to claim 1 wherein said improvement further
comprises:
15 first and second actuators; and
first and second cables, said first cable being coupled to said first actuator and
said second cable being coupled to said second actuator, said contact element coupling said
first and second cables, said first and second cables moving along a path including a path
portion at or below said layer building plane and a path portion above said layer building
20 plane.
4. An improvement according to claim 1 wherein said improvement further comprises
a plate as said contact element, said plate being pivotable between said first position and said
second position.
- 25 5. An improvement according to claim 1 wherein said improvement comprises
said contact element being moveable by at least one of linear and rotatable motion from said
first position to said second position.

6. An improvement according to claim 5 wherein said contact element mounts upon a flexible support element and said flexible support element moves along a path including portions adjacent to said first position and adjacent to said second position.

5 7. An improvement according to claim 1 wherein said contact element moves linearly into said second position.

8. A palletizing layer head comprising:
a retractable floor movable between a closed position coincident with a layer
10 building plane and an open position; and
a contact element positionable between a submerged position at or below said layer building plane and an engagement position above said layer building plane.

9. A palletizing layer head according to claim 8 further comprising side clamps.
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10. A palletizing layer head according to claim 9 wherein said side clamps are sufficiently spaced relative to said layer building plane to allow movement of said contact element between said layer building plane and said side clamps.

20 11. In a method of constructing a stack of items including forming a layer of items upon a layer head and withdrawing a floor from thereunder, an improvement comprising:
engaging a first-to-drop set of items with a guide element as said retractable floor moves out from under said first-to-drop set of items.

25 12. A method according to claim 11 wherein said engaging step includes moving said guide element pivotally into contact with said first-to-drop set of items.

13. A method according to claim 11 wherein said engaging step comprises moving said guide element linearly into contact with said first-to-drop set of items.

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14. A method according to claim 11 wherein engaging step comprises guiding said first-to-drop set of items between said guide element and a next-to-drop set of item.